



MWH Ref: Z1926931

04 February 2011

Queenstown Lakes District Council
Private Bag
Gorge Road
QUEENSTOWN

Attention: Denis Mander

Dear Denis

**Proposed Private Plan Change 36: Ballantyne Industrial B Zone
Engineering Advice re: Traffic and Road Design**

Refer your email of 27 January 2011.

1. Background

Queenstown Lakes District Council (QLDC) has submitted Plan Change 36 – Wanaka Industrial Zone Extension that seeks to:

- Change the zoning of the industrial land on Fredrick Street from Rural General to Industrial to reflect the use of the land; and
- Rezone additional land between Fredrick Street and Gordon Road to enable industrial and business activities.

PC36 will create approximately 8.8ha of new industrial land that will contribute towards the minimum of 20ha of land required by 2020. QLDC's current proposals involve provision of approximately 26ha of new industrial land by 2020.

A submission has been received from Orchard Road Holdings Limited (ORHL) that seeks extension of the PC36 boundary to include land that it owns or rejection of PC36 in its entirety.

MWH has been requested to comment on the proposed road structure submitted by ORHL with respect to:

1. The proposed roading structure through the industrial extension is beneficial from a connectivity/efficiency perspective,
2. The proposed access with bunding (Refer to Appendix B; ORHL submission, attached) is appropriate for the ORHL proposed residential area; and
3. Whether the proposed new residential access road onto Ballantyne Road will create any issues.

2. Consideration

2.1 Proposed Roading Structure

Ballantyne Road is classified as *Collector Road* under Appendix 6 of the District Plan.

The ORHL submission proposes construction of an access road through the industrial land that would form a T-intersection with Ballantyne Road approximately 200 metres south of Fredrick Street. The access road appears to be 20 metre wide road reserve with plans including a 10 metre wide bunding and would be limited access. There are insufficient details to determine the cross sectional nature of this road. The access road continues to the southwest to provide access for a future proposed residential subdivision, and while not shown, could reasonably be expected to continue to intersect with Orchard Road in the future. Two spline roads are proposed, the first linking to Frederick Street via roundabouts and the second approximately 100 metres southwest, which is shown as no exit but would likely connect to potential future developments in the local area. Land plans supplied in the ORHL submission indicate that a portion of Lot 3 is included in the submitters proposed land plan change. The remaining balance of Lot 3 forms connectivity of land direct through to Orchard Road.

The following comments relate to the access road running from Ballantyne Road into the proposed residential development and the connecting spline road to Frederick Street. There was insufficient information to evaluate the effects of the remaining proposed roading structure.

While not stated, it appears both roads would be constructed to Collector Road status and will serve a primary function of connecting the residential area, via Local Roads, to Ballantyne Road. The proposed access roads allow the residential traffic to be separated from the industrial traffic, which provides safety benefits with the separation of mixed traffic uses. They will also cater for traffic generated by the proposed future residential development, and reduce the impacts of these developments on Frederick Street. This may lead to landlocked areas if the internal road structure is not appropriate. Exclusion of industrial traffic on (bund) main access road would result in poor connectivity to industrial land. Details on how the proposed industrial land will be serviced need to be provided.

The location of the ORHL proposed access road bisects the existing industrial zone, and could be moved further south to the southern extent of the existing industrial zone, and the link road provided to Frederick Street with another link road provided further west parallel to Frederick Street. A modified version of the proposed plan would be more consistent with the Wanaka Transportation Study Scoping Report and would provide for growth within the greater area however similar concerns relating to access to the industrial areas as described above exist.

Overall, the proposed structure is not inconsistent with area wide plans, however the location of proposed roads could be adjusted to provide for development of the greater area, yet maintaining an effective road to service all land parcels. A modified version of the proposed structure is likely to provide connectivity and efficiency improvements with an appropriate roading structure.

2.2 Proposed Access with Bunding

In consideration of the comments above, the form of the access road proposed would be consistent with the provision of access to a residential area. While cycle and pedestrian provisions have not been mentioned, it is expected that off-road provisions would be made.

Of note is the fact that if this road is created as a limited access road for residential access, then there would be poor connectivity to the adjacent industrial extension to the north of the proposed road. This would therefore result in potential access requirements onto the Fredrick Street link, potentially resulting in industrial traffic on the proposed residential road network.

A road cross section needs to be provided to fully evaluate this point.

2.3 Ballantyne Road intersection

The assessment has been undertaken to the best of our ability based on the limited overall development information supplied, the proposed location for the (bunding) access road does not appear to conflict with

any future intersections associated with the Three Parks Development. It is noted that the Three Parks Development has a primary access located north of the existing oxidation ponds. Simple measurements would indicate that there would be a separation of some 400m however this should be confirmed with more accurate details.

The form of this intersection would need to be determined via traffic modelling, with the location of adjacent existing industrial zone accesses having an impact on the proposed residential access to Ballantyne Road requiring further evaluation. Existing use accesses may present conflicts of turning movements with the proposed residential access.

If the proposed intersection was located further south to the extent of the existing industrial zone, as noted in Section 2.1, the likely conflicts with adjacent activities would be reduced.

Yours sincerely



Oliver Brown
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MWH New Zealand Limited